

On the morphology and distribution of *Dipolydora giardi* and status of *D. trilobata* (Annelida: Spionidae)

VASILY I. RADASHEVSKY¹ & MARY E. PETERSEN²

¹Institute of Marine Biology, Russian Academy of Sciences, Vladivostok 690041, Russia
(radashevsky@mail.ru)

²Zoological Museum, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark

²Present address: Darling Marine Center, University of Maine, 193 Clarks Cove Road, Walpole, ME 04573,
USA (mepetersen@maine.edu)

Abstract

The spionid polychaete *Dipolydora giardi* (Mesnil, 1896), originally described as a borer in coralline algae from northern France, was later reported world-wide boring into various shells, sponges and also inhabiting mud tubes on soft bottoms. The reported morphological variability and wide range of habitats suggested that more than one species might be involved. In the present study, *D. giardi* is redescribed based on some material from northern France sent by F. Mesnil in 1896 to the Zoological Museum, University of Copenhagen, and on new material collected in Italy. The species is characterized by its incised prostomium, caruncle to the end of chaetiger 3, branchiae on the anterior half of the body (usually beginning on chaetiger 10), pygidium with one ventral lobe and two smaller dorsal lobes, and heavy falcate spines of chaetiger 5 with a large lateral tooth on one side and a smaller accessory spur on the other side. *Dipolydora trilobata* (Radashevsky, 1993) is a closely similar species, but is maintained as distinct. *Dipolydora anoculata* (Moore, 1907) is probably a valid species and should be removed from the synonymy of *D. giardi*.

Key words: Spionidae, *Dipolydora anoculata*, *Dipolydora giardi*, *Dipolydora trilobata*, polychaete, morphology, taxonomy, distribution

Introduction

The spionid polychaete *Dipolydora giardi* was originally described by Mesnil (1896), as *Polydora giardi* from l'anse St. Martin, La Manche (St. Martin's Bight, English Channel), northern France, as a borer of *Lithothamnion*-like coralline algae. Since then, the species has been found boring into various calcareous substrata and sponges, or inhabiting mud tubes intertidally to 200 m or more, and reported from world-wide locations (Figure 1).